**SAFER ALTERNATIVES RULE DEVELOPMENT WORKSHOP**
**Wednesday, February 18, 2009**
**Berkeley, California**

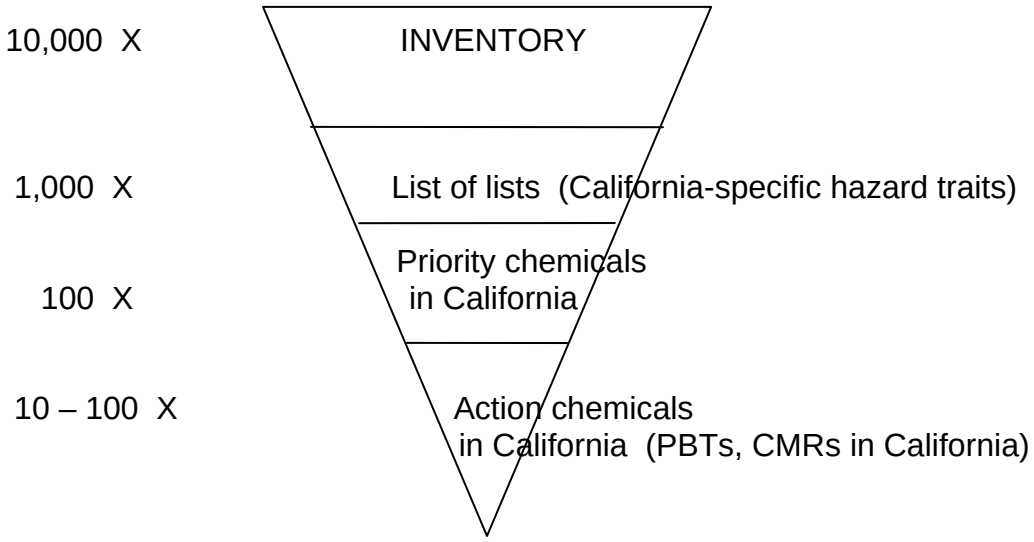
## BREAKOUT GROUP #1:
## Rule for Process to Identify and Prioritize Chemicals of Concerns in Consumer Products

### First Easel Page

Identify Chemicals of Concern

- Human health criteria
- Environmental criteria
- How to create a fluid list—cast wide net to define more tangible prioritization criteria
- What constitutes scientific evidence?
- Who decides? OEHHA?
- Some things in the law are not optional
- Requirement on number of studies?
- Hazard criteria

### Second Easel Page




- Health and environmental importance of hazard
- Volume and use characteristics
  - Occupational
  - Ubiquitous

    * toxicological and environmental end-points and other relevant data (Clearinghouse)

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### Third Easel Page

Chemical of concern:

- Definition should work for SB 509 and AB 1879
- Hazard trait, toxicological, and environmental end-points—other relevant data (Clearinghouse process)
- What do you do with a false negative?
- Use list as guide and inform what will be a chemical of concern

Prioritization:

- What is adequate data to move forward?
- What do you do when no information is available for a chemical?

Chemical of concern:

- Based on hazard traits, toxicological and environmental end-points and other relevant data as determined by the Clearinghouse process
- Use the existing lists of chemicals evaluated by those traits but not limited to the chemicals on those lists

### Fourth Easel Page

Identify Chemicals of Concern:

- Emerging contaminants
- All CAS chemicals—probably too much
- TSCA inventory (85,000 chemicals) as possible start
- High production volume (HPV) chemicals
- Do not have use information nor authority
- List of lists
- European Union "Substitute It Now (SIN)" list
- California cannot recreate all of the lists
- European Union SIN list—90% easy; 10% differing considerations
- High production volume as a criterion—is it used in products?
- Toxic Clearinghouse: can that law be used to obtain use data? (Probably not)
- Can DTSC act as a moderator with reliance on broad community to provide chemicals? Setup website and have input from groups and public, with rules, for selecting chemicals of concern
- What are criteria for chemicals of concern?

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## BREAKOUT GROUP #1:
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### Fifth Easel Page

Chemical of concern:

- List of lists plus criteria characteristics OR
- Criteria that put chemical on list(s)
- Agency will also solicit input from public via web-based tool (Wiki, etc.) and evaluate?
- List of lists—are there criteria missing? Or, are existing lists sufficient?
- AOEC list: respiratory sensitive/irritant/toxicity chemicals associated with occupational exposure
- Define chemical of concern by criteria or hazard characteristics
- Characteristics:
  - Certain ones will be included
  - What are the bright line end-points that make a chemical of concern
- Adaptive implementation—we do not know everything now

### Sixth Easel Page

Prioritization:

- CMRs, PBTs, genetic mutation, endocrine disruptors
- Tie to use?
- Is it even used?
- High product volume as a factor—first actionable list
- Hazard plus exposure—not just high production volume
- It also has to do with the cumulative effect
- Use aspects of chemical (table versus sun tan lotion)
- Acute versus long-term impacts (example, water quality)
- First Order—PBTs: environment and human
- If information becomes available about toxicity [for] high exposure chemicals—push to top priority
- Occupational exposure? If consumer products
- Ubiquitous chemicals used identified as chemical of concern
- Use in interfering with ability to comply with the law

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## BREAKOUT GROUP #2:
## Rule for Process for Alternatives Analysis

### First Easel Page

- No alternatives?
- Is the alternative better or worse?
- What is the definition of "safer alternative" in a specific application or product?
- [One] size does not fit all; different criteria for use?
- What does "safer" mean?

### Second Easel Page

How does regulation impact industry?

For example, Design for the Environment (DfE) assessment—flame retardant review; do not come up with specific regulatory position

- How often will list/process be revisited?
- New versus old?
- Grandfather?
- How much data is available?
- Re-assessment timeline?

Proposition 65
- Calculation of risk/exposure
- Allows for lesser amount of data

### Third Easel Page

Definitions
1. "Consumer product"
2. What is "safer"?
3. Define need

Purposes
1. Provide manufacturers with information for improvement/look for better alternative
2. Inform the regulatory response

Chemical → Use → Alternative
How to identify?

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## BREAKOUT GROUP #2:
## Rule for Process for Alternatives Analysis

### Fourth Easel Page

Results of assessments
- Post online
- Allow for public comment
- Feasible?

Alternatives assessment: help to inform the regulatory body

Regulatory action and assessment are not inextricably linked

Chemicals of concern
- No alternative?
- What happens next?
- Inform the regulatory response

Chemical of concern → Green alternative → Next step

### Fifth Easel Page

Alternative [to chemical of concern]

1. Data requirements
2. Reliable and reproducible results and methods

Who decides what is needed versus functionality?

Massachusetts Toxics Use Reduction Act (TURA)
- Similar outcome?

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Mandate process → Report information /public input →

→ Work to identify alternatives (Green/Blue database, DfE, etc.)

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## BREAKOUT GROUP #2:
## Rule for Process for Alternatives Analysis

Sixth Easel Page

Focus on functional groupings rather than chemical by chemical

Include lifecycle considerations

Open process → Web 2.0 → Identify best practices
Identify alternatives

DTSC

- Re-think roll
- Instead of making list
- Facilitate that information is reliable

* Have workshop where DTSC brings in outside people to learn good/bad
=> TURA, DfE, Green/Blue, etc.

How do we deal with data gaps in the analysis?

Seventh Easel Page

1. Identify new alternative versus existing

   Sufficient data set
   Hazard/safety/cost/efficacy/availability

2. Review and comparison of data

3. Public transparency

Matrix pages

## BREAKOUT GROUP #3:
## Life Cycle Analysis

Opening focus statement- What is the process –tool for LCA?

Questions
Q- Does LCA apply to a chemical or products or use?
A- Products
Q- Can LCA info factor into identifying the chemical of concern?
A- Include this in the prioritization group discussions
Q- Are there existing stds for LCA?
A- Yes -ISO stds but these are basically guidelines
Q- What are the criteria to consider in LCA?

- exposure
- volume of use of CoC
- user (children, etc)

LCA, within alternatives assessment should consider:

Toxicity

- hazard exposure should be paramount since other drivers/requirements exist for energy efficiency, water, GW, etc

Function
GHG's
Water
Air
Production
End of life/Disposal
Energy
Raw materials

LCA methods
Need process to determine product category of greatest concern with a given CoC
Time limits to complete study/AA
Steps for minimum lca requirements use existing LCA stds and simplify?

- Take a common sense approach to look at LCA criteria, no need to run every alternative thru full LCA; but needs to be multimedia and cradle to grave
- Should more heavily emphasize exposure
- Simplified LC thinking framework approach, or scorecard tool? Qualitative vs quantitative? Is qualitative too "fuzzy"? Are full LCA results actually definitive?
- Desired attributes at minimum? Can weight hazard/exposure more than others?
- How to deal with data gaps and alternative decision making

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## BREAKOUT GROUP #3:
## Life Cycle Analysis

WiKi proposed language now has -to assess raw materials chemicals, water, energy
Then reassess with chemical switch out or other product changes using LC thinking.

Confusion about LCA in context and the overall process encountered-
First a chemical is identified, then the product or product category, then alternatives analysis, then action. Same as flow chart in AM presentations.

Outcome of LCA in AA- How to engage designers suppliers to redesign?

Really need disclosure of chemicals in products to begin with-
Screen using Clean Product Action hazard screen or other tools?

Who does the AA/LCA?

- Manufacturers of product or component
- Industry association
- Maker/marketer of alternative

## BREAKOUT GROUP #4:
## Rule for Regulatory Response

### First Easel Page

Consider EU REACH approach:

1. Manufacturers do assessment
2. Ends users collaborate [to give feedback to manufacturers and regulators]
3. Regulators impose rigor and enforce

"Ban" as regulatory response:

California should ban IF ALL of the following:

- Product contains a chemical of concern in the top five priority rank
- Any biomonitoring, ecological, epidemiological data shows presence and risk
- Use in product results in likely exposure for vulnerable population, such as infants (several participants pointed out that broader definition of vulnerable population exists in Clean Drinking Water Act and also in Health and Safety Code section 116365.28)
- The chemical of concern is not necessary because a functional [defined broadly] substitute(s) [that does not meet any of the above] is/are available

### Second Easel Page

"Labeling" as regulatory response:

California should require labeling IF:

- Substance [chemical ingredient in product] is on the "ban" list [see above]
- Chemical of concern necessitates end of life management

  (example, heavy metals in brake pads should carry some sort of label indicating proper end-of-life management so environmental harm/aquatic toxicity is prevented)
- "Presence" [of chemical of concern] would trigger label response
- Considerations:
  - ⋆ Level/concentration: "above a certain level" (such as a federal standard, FDA, Proposition 65 MADL/safe harbor number) would trigger label requirement
  - ⋆ What is exposure is limited or virtually non-existent?

## BREAKOUT GROUP #4:
## Rule for Regulatory Response

- ⋆ What if chemical is not intentionally added? (example, pollutant at very low concentration in water from public system used in manufacturing)
- ⋆ "Exposures" defined by complex multi-media/human/environmental

Regulatory response criteria CAN stand apart from alternatives analysis/lifecycle

Third Easel Page

Commodity products

Pros/cons of regulated versus unregulated

Label → On product/packaging
or
→ On website

Could a "good" label (absence of chemicals of concern) be used? [consensus is NO]

"End of Life" management as regulatory response:

- ★ Take back program
- ★ Recycling
- ★ Demanufacturing/Destruction
- ★ Reuse
- ★ Others ??

California should require end-of-life management IF:

- Substance [chemical ingredient in product] is identified as a chemical of concern and as hazardous [see label above] which requires some sort of EOL management

"Manufacturer" take-back program IF:

- Chemical of concern presents harm at end of life and labeled as part of take-back program
- Responsible take-back program must include:
  - Minimum percentage
  - No dumping/export
  - Etc.

## BREAKOUT GROUP #4:
## Rule for Regulatory Response

### Fourth Easel Page

- Exposure: Lead in child's toy where no exposure (inside and not accessible) versus exposure
- From origin to end-of-life (i.e., computer disassembly)
- Use

Example,

No further action if lead in child's toy is in compliance with federal CPSIA

- Manufacturer conducts critical anticipatory assessment and regulators make sure those are done
- Manufacturer required to submit data
- What about by-products and reaction products?

* Consider problem set as functional groups or classes of:

-- chemicals with similar functions (i.e., flame retardants)

-- products (cleaners)

-- users (children)

### Fifth Easel Page

Regulatory Responses

- What does law apply to?
- Consumer products for sale/use in California
- Not limited to "made in California"
- What about a chemical ingredient that is not intentionally part of the product?
- Must differentiate size: small, medium, and large manufacturers have different capabilities

## BREAKOUT GROUP #4:
## Rule for Regulatory Response

Sixth Easel Page

No Further Action response

Considerations:

- Specified conditions exist
- Kinds of products with that chemical
- Production volume

Focus on knowns given limited resources—start with ban

Level of toxicity, exposure, affected sub-populations (children)

Need an inventory

“hazard” is not the same as “risk”